Exemplar for internal assessment resource Mathematics and Statistics for Achievement Standard 91258

Student 5: Low Achieved

NZQA Intended for teacher use only

BA High rise

Ground floor =
$$(102 \times 8) + (120 \times 24) = $3696$$

$$(120 \times 24) = a$$

Floor 15 =
$$t_n = ar^{n-1} = 2880 \times 1.05^{14} = $5702.20$$

Total = \$6518.2

(1)

Floor 23 =
$$t_n = ar^{n-1} = 2880 \times 1.05^{22} = $8424.75$$

Total = \$9240.75

Total of 15 =
$$s_n = \frac{a(r-1^n)}{(r-1)}$$
 = \$62146.26+(102 x 8) x 15 = \$74386.26

IA High rise

Ground floor =
$$(65 \times 16) + (103 \times 28) = $3924$$

$$(103 \times 28) = a$$

Floor 15 =
$$t_n = a + (n-1)d = 2884(15-1)3 = $2926$$

Total = \$3966

Floor 32 =
$$t_n = a + (n-1)d = 2884(32-1)3 = $2977$$

Total = \$4017

Total of 15 =
$$s_n = \frac{n}{2}(2a + (n-1)d) = \frac{15}{2}(5768 + (14 \times 3)) = $43575 + ((65x16)15) = $59175$$

Total of 20 =
$$s_n = \frac{n}{2}(2a + (n-1)d) = \frac{20}{2}(5768 + (19 \times 3)) + ((65 \times 16)15) = $73850$$